Chapter 1. Introduction

The Army will be a national leader in environmental and natural resource stewardship for present and future generations as an integral part of our mission.¹

The Army's commitment to natural resources management is reflected in the US Army Environmental Strategy for the 21st Century. The Army environmental strategy is represented by a structure established on four pillars that support environmental stewardship of Army lands, and resting solidly on this stewardship is the Army's overall mission of training soldiers.

The four pillars symbolize the Army environmental program and represent the four major areas of activity. The area of concern here, the conservation pillar, focuses on responsibly managing Army lands to ensure long-term natural resource productivity so the Army can achieve its mission. Conservation balances long-term resource use and resource protection.

As a steward of natural and cultural resources, the Army also practices preservation. Preservation focuses on resource protection. This could mean more restricted use by the Army community. Preservation is essential for ensuring the future integrity of valuable and unique natural resources, such as wetlands, endangered species, important habitats, as well as historically significant cultural sites.

The Army's commitment to natural resources management also is reflected in Army Regulation 200-3 (*Natural Resources–Land, Forest, and Wildlife Management*), which requires the preparation and implementation of INRMPs for all Army installations with significant natural resources. This INRMP is a tool to help natural resources personnel implement ecosystem management at Fort Richardson. The INRMP looks at how Fort Richardson's natural resources program integrates with other programs such as military activities, the environmental program as a whole, outdoor recreation, the National Environmental Policy Act, cultural resources, surrounding communities, and neighboring lands. It is also a source of information for responsible or interested parties that are not directly managing Fort Richardson's natural resources.

1.1 Goals and Policies

1.1.1 Goals

The primary goal of the natural resources management program at Fort Richardson in the 2002-2006 period is to move to a more comprehensive ecosystem approach to management, in which land-use decisions will be made at the landscape scale and with regard to mulitple species. (There are currently 96 species on the list of species to manage in the ecosystem management program, see Chapter 3, Section 3.4.2.) In this management scheme, human use of Fort Richardson lands (both military and recreational-use) are directly included as components of the ecosystem, just as wild species are ecosystem components. This transition to ecosystem management will be gradual, however, as natural resources management at Fort Richardson has for many years emphasized only the larger mammal and bird species that occur on post. Hence the reader of this INRMP will find some elements of a "single-species" management scheme intermingled with an ecosystem approach. This represents the current state of affairs in natural resources management at Fort Richardson, and to a large extent reflects the perspectives of the current staff. The reader is referred to Chapter 3 for a description of the specific methods to be used to

Integrated Natural Resource Management Plan

¹ Army Environmental Policy Institute. 1992. *U.S. Army Environmental Strategy into the 21st Century*. U.S. Government Printing Office 1993-747-677, 38 p.

make land-use decisions at the landscape scale, and for multiple species at the same time. This is the direction that the natural resources program at Fort Richardson will take in the future.

Over the next five years this INRMP and the programs outlined here will be refined as needed. Ecosystem management is still an evolving management scheme and as new information and ideas are gleaned from current research, Fort Richardson's management will change to reflect the best information available. The primary goal of the natural resources program at Fort Richardson, however, remains one of supporting USARAK military and non-military activities while maintaining a functional, healthy ecosystem. Ecosystem management is simply another tool to achieve this goal.

The following general goals represent USARAK's commitment to manage natural resources at Fort Richardson. All five goals support not only the management of natural resources, but also support the overall military mission. Descriptions of the objectives and tasks needed to attain these goals are presented in Chapters 3–7.

Military Readiness. Provide quality natural resources, as they are critical training assets for accomplishing the military mission of USARAK at Fort Richardson.

Stewardship. Manage natural resources at Fort Richardson to ensure good stewardship of public lands that are entrusted to the Army's care.

Quality of Life. Improve the quality of life for the Fort Richardson community and the general public through development of high quality natural resources-based recreational opportunities.

Compliance. Comply with federal and state laws and regulations that pertain to management of Fort Richardson's natural resources.

Integration. Integrate elements of natural resources management into a single program that in turn is integrated into Fort Richardson's environmental and military training programs.

1.1.2 Intermediate Steps

The statements listed below represent the general USARAK steps for attaining the goals presented in Section 1.1.1 above. These statements will serve as a checklist for monitoring this INRMP's success. More specific goals and objectives are presented in Chapters 3–7.

Military Readiness

- Ensure no net loss in the capability of Fort Richardson's lands to support existing and projected military missions.
- Maintain quality training lands through damage minimization, mitigation, and restoration.

Stewardship

- Use ecosystem management principles to guide the protection, conservation, and restoration of native flora and fauna.
- Monitor and manage soils, water, vegetation, and wildlife on Fort Richardson with a
 consideration for all biological communities and the human values associated with such
 communities.

- Provide products from renewable natural resources when they can be produced in a ecologically sustainable fashion and without significant negative impacts on the military training mission.
- Provide professional enforcement of natural resource laws.
- Involve the surrounding communities in Fort Richardson's natural resources program.
- Ensure that the Fort Richardson natural resources program is coordinated with state and federal resource agencies and conservation organizations with similar interests.

Quality of Life

- Provide opportunities for consumptive uses of natural resources within reasonable biological limits and while maintaining a quality recreational experience.
- Provide natural resource-based opportunities for other outdoor recreation, such as hiking, snowmachining, rafting, birding, etc.
- Provide conservation education opportunities to the military and civilian community.
- Establish and maintain an environmental setting conducive to a healthy and enjoyable lifestyle for the military community.

Compliance

- Manage natural resources within the spirit and letter of environmental laws, particularly the Sikes Act upon which this INRMP is predicated.
- Manage so as to protect wetlands and unique ecological areas, and maintain or enhance populations of sensitive species.
- Use the NEPA process to make informed decisions that include natural resources considerations, mitigation, and agency and public involvement.
- Ensure that Fort Richardson's natural resources program is consistent with the protection of historically significant cultural resources.
- Implement this INRMP within the framework of Army policies and regulations.

Integration

- Ensure the integration of, and consistency among, the various activities identified within this INRMP
- Ensure that natural resources management is consistent with principles of Integrated Pest Management at Fort Richardson
- Ensure the integration of new military infrastructure development with the principles and guidelines of this plan
- Coordinate the implementation of natural resources management with the overall Fort Richardson Environmental Program
- Use the natural resources program to support and enhance other elements within the Fort Richardson Environmental Program
- Provide the command with information needed to make decisions, which include natural resources related values

1.1.3 Fort Richardson's Land and Natural Resources Management Policy

Over the last 10 years, US Army Alaska has been inundated with numerous requests and proposals from state, federal, and municipal government agencies, businesses, utilities, clubs, organizations, and individuals for authorization or permission to use Army lands for nonmilitary purposes. These requests have included commercial or long-term real estate interests involving right-of-ways, easements, land-use

permits, leases, outgrants, land transfers, exclusive use areas, and special concessions, many of which have detrimental effects on current or future military training on Fort Richardson. These types of requests will probably increase in the future as the populations of Anchorage and its satellite communities continue to grow.

In general, it is current USARAK policy to deny requests for nonmilitary uses of Fort Richardson properties if those requests include or involve a requirement for long-term real estate commitments such as leases, easements, or land transfers, or if they create a potential adverse impact on the military mission or the environment. The only exceptions to this would be when such actions clearly result in tangible benefits to the military training mission or to the environment. No longer is "good public relations" alone, a justifiable reason to sacrifice limited and crucial training lands. It is also the position of USARAK to adopt a policy which favors temporary, noncommercial low-impact uses of Fort Richardson by the local community, consistent with training and the military mission, as long as Fort Richardson natural resources will not be adversely impacted.

The full policy statement is included in Chapter 3, Section 3.4.5, and it includes examples of past requests for land-uses and examples of acceptable ongoing non-military land-uses. This INRMP will be used for decisions and actions that affect or have a potential to impact Fort Richardson lands, waters, and other natural resources.

1.2 The Plan

The Sikes Act Improvement Act of 1997 (SAIA), Public Law 105-85, Section 670a(a)(3), states that

Consistent with the use of military installations to ensure the preparedness of the Armed Forces, the Secretaries of the military departments shall carry out the program required by this subsection to provide for the conservation and rehabilitation of natural resources on military installations; the sustainable multipurpose use of the resources, which shall include hunting, fishing, trapping, and non-consumptive uses; and subject to safety requirements and military security, public access to military installations to facilitate the use.

To facilitate the program, the law requires that integrated natural resources management plans (INRMP) be prepared and implemented for each military installation, including withdrawn public lands. Each plan must be consistent with the use of military lands to ensure military preparedness and cannot result in any net loss in the capability of the installation to support the military mission. In accordance with Section 670a(b) of the act, to the extent appropriate and applicable, an INRMP should provide for the following:

- Fish and wildlife management, land management, forest management, and fish- and wildlifeoriented recreation.
- Fish and wildlife habitat enhancement or modifications.
- Wetland protection, enhancement, and restoration, where necessary for support of fish, wildlife, or plants.
- Integration of, and consistency among, the various activities conducted under the plan.
- Establishment of specific natural resource management goals and objectives and time frames for proposed actions.
- Sustainable use by the public of natural resources to the extent that the use is not inconsistent with the needs of fish and wildlife resources.
- Public access to the military installation that is necessary or appropriate for the use described above, subject to requirements necessary to ensure safety and military security.
- Enforcement of applicable natural resource laws (including regulations).

- No net loss in the capability of military installation lands to support the military mission of the installation.
- Such other activities as the Secretary of the military department determines appropriate.

An INRMP guides the natural resources management programs at each installation. Implementation of the INRMP management measures maintains, protects, and enhances the ecological integrity of the training lands and the biological communities inhabiting them. USARAK prepares its INRMP in cooperation with BLM, USFWS, and with ADF&G. This continuous interagency participation results in a document that reflects the mutual agreement of DoD, DOI, and the State of Alaska concerning conservation, protection, and management of natural resources. USARAK also provides an opportunity for the public to review and submit comments on the INRMP.

1.2.1 Purpose of the Plan

The primary purpose of this INRMP is to present natural resource goals and policy that USARAK, ADF&G, USFWS, and BLM will use to manage military lands in Alaska. It is the intent of DOD, DOI, and the State of Alaska to clearly and openly express these goals and policies to the public.

The secondary purpose of this INRMP is to guide natural resource managers and personnel in USARAK and BLM in their decision-making for the management of military land in Alaska and implementation of the projects listed within.

The third purpose of this INRMP is to establish an updated cooperative agreement between USARAK and federal and state agencies (ADF&G, USFWS, and BLM) which dictates how military lands in Alaska will be cooperative managed by the four agencies (see Appendix B).

A further purpose of this INRMP is to serve as a funding requirements document for the management of natural resources on military lands. All of the projects listed in this INRMP are also used to meet the requirements of the Environmental Program Report (EPR). Projects are identified as high, medium, and low priority within the INRMP which relate to the Class 1, 2, and 3 funding priority definitions in the EPR. USARAK must fund all high (Class 1) projects listed in this INRMP, and will fund all medium (Class 2) and low (Class 3) projects if funding is available.

1.2.2 Scope of the Plan

The focus of this INRMP will be on the management of natural resources on the military installation. The management measures have been developed based on the current conditions of the resources, and the military mission and activities as they are anticipated. This INRMP will guide natural resources management of Fort Richardson for the next five years (2002-2006) and provide a solid foundation from which to build and continue the program beyond the year 2006.

1.2.3 Structure of the Plan

This INRMP is organized as follows:

Chapter 1: Introduction describes the overall natural resources goals and objectives; gives a brief review of past natural resource management actions; defines joint management and stewardship of USARAK lands; and states the military mission. Specific INRMP objectives and military, federal, state, and local responsibilities and partnerships are also explained. The integration of NEPA compliance within

this INRMP is also discussed including defining alternatives and summaries their environmental consequences.

Chapter 2: Affected Environment describes the relevant environmental resources of USARAK lands.

Chapters 3-7: Natural Resource Programs, Responsibilities, and Management Alternatives describes the overall conservation program at USARAK. Specific program goals, objectives, descriptions, and responsibilities are defined. Also listed are the alternative actions for each natural resource program. Detailed Action Plans have been developed to describe, in greater detail, each project to be implemented. These Action Plans will be referenced in this chapter.

Chapter 8: Natural Resource Program Implementation outlines procedures to implement the INRMP and its associated actions. This includes funding mechanisms; priorities; staffing requirements; planning methods; and command support.

Chapter 9: Environmental Consequences determines the impacts of each alternative on the relevant environmental resources and are presented in matrix form. Cumulative impacts are considered for each resource.

List of Preparers and Contributors identifies the individuals, with their qualifications, who prepared this document and indicates the sections they completed for contributed towards their completion.

References section documents all sources referenced in this document.

Agencies and Individuals Contacted identifies local, state, and federal agencies and individuals who were contacted by the preparers of this document for consultation of their expertise.

This INRMP is an umbrella document for a number of more detailed Action Plans. While the INRMP is more general, describing projects to be implemented, the Action Plans have information detailed enough to prepare a scope of work for each project. Each Action Plan is an **Appendix** to this INRMP and will have an EA and FNSI. The action plans are as follows: Forest Management Action Plan, Habitat Management Action Plan, Wetlands Management Action Plan, Soil Resources Action Plan, Fire Management Action Plan, Outdoor Recreation Management Action Plan, Aviation Management Plan, Special Interest Areas Management Plan, and Ecosystem Management Action Plan.

The Cultural Resources Management Plan and Integrated Pest Management Plan are written as separate plans.

1.2.4 Bureau of Land Management Planning

The Federal Land Policy And Management Act (FLPMA) of 1976 requires BLM to develop, maintain, and when appropriate, revise land-use plans. The objective of BLM's land-use planning is to ensure that public lands are managed under the principles of multiple use and sustained yield by:

- Providing a process for evaluating resource information, which includes consideration of social and economic factors, to decide appropriate public land-uses.
- Ensuring participation by the public, state and local governments, Indian tribes, and appropriate federal agencies.
- Using collaborative and multi-jurisdictional approaches to ensure consistent decision making across different land ownerships and jurisdictions.

- Providing a documented record of land allocations and permissible resource uses and constraints that are available to the public.
- Providing a framework to guide subsequent implementation decisions.

BLM has developed a comprehensive land-use planning base consisting of decisions reached in its resource management plans. BLM land management is an ongoing process of decision making, implementation, monitoring and assessment, and adjustment that allows for continuous corrections and reduces the need for major plan revisions. New information or proposals might necessitate a plan revision or an update to a plan's associated National Environmental Policy Act (NEPA) analysis. BLM's nine-step planning process, in 43 CFR Part 1600, integrates the NEPA decision-making process. New RMPs and RMP revisions require an Environmental Impact Statement (EIS).

This INRMP does not conflict with BLM management planning for Fort Richardson.

1.2.5 Section 106, National Historic Preservation Act (NHPA)

In the past, natural resources projects were overlooked as potential causes of adverse impacts to archeological sites. Activities such as tree removal and training land restoration are all potentially damaging. In order to reduce negative impacts to cultural resources, projects that involve ground-disturbing activities will be processed through the USARAK Natural Resources cultural resources manager. Furthermore, the cultural resources manager will be consulted in areas of long-range planning (such as the INRMP) that delineate policy.

Determination of effect and consultation guidelines provided in implementing regulations for the National Historic Preservation Act (36 CFR 800) will be followed during ERD review of projects. Any project assessed as having an effect on a cultural resource site or historic property at Fort Richardson will be coordinated with the Alaska SHPO.

Natural resources-related law enforcement also has potential impacts on preservation of cultural resources. If natural resources enforcement officers are added to the Natural Resources Branch staff, they will also be trained in enforcement of various cultural resources laws, especially the Archeological Resources Protection Act.

Natural and cultural resources are not mutually exclusive. Personnel involved in both of these programs at Fort Richardson will work closely with one another to insure their successful integration.

Section 106, NHPA has been considered in the preparation of this plan and it has been determined that there are no significant issues associated with the implementation of this plan.

1.3 Background

1.3.1 Location and Neighbors

From the very beginning, the people of Alaska have welcomed and supported the military in their state.²

Fort Richardson is located in southcentral Alaska, approximately seven miles northeast of downtown Anchorage. At 149° 40' west longitude and 61° 15' north latitude, Fort Richardson is situated between two

² Lt. Gen. L.E. Boese, Commander, Alaskan Commander in Forces for Freedom, Anchorage Daily News, May 14, 1995

prominent natural features—the Knik Arm of Cook Inlet to the north and the Chugach Mountains to the east (Figure 1-1.)

1.3.2 Acreage, Acquisition, and Land Status

1.3.2.1 Acreage

Fort Richardson encompasses approximately 61,000 acres. Due to federal government domination of most land in Alaska in the 1940s and the small population of Anchorage at that time (less than 10,000), land acquisition for military purposes was relatively uncomplicated. Most public domain land was acquired for military use by Executive and Public Land Orders. Several small parcels of private land, e.g., homesites and homesteads, were purchased outright by the Army and are owned as fee simple.

1.3.2.2 Land Acquisition for Military Use

In 1939, an Executive Order (EO) was issued that withdrew 36,570 acres of land from the public domain placing it under War Department jurisdiction. This land, along with small fee-based (private land) acquisitions, subsequent EOs, Public Land Orders (PLO), make up the predominant land base of Fort Richardson today. A time line and explanation of the numerous EOs and PLOs can be found in Appendix E. Figure 1-2 shows the status of lands on Fort Richardson in terms of those owned by the Army and those withdrawn. Figure 1-2 also shows the lands that once were a part of Fort Richardson.

Between 1939 to 1945, approximately 151,180 acres of land were withdrawn for military use. Fort Richardson originally resided on land that Elmendorf AFB currently occupies. In 1950, Fort Richardson was moved east to its current location, and 9,042 acres were transferred to the Air Force, which later became Elmendorf AFB.

From 1945 to 1955, the military returned approximately 85,000 acres to the Department of the Interior. Many EOs stipulated the return of these lands following the end of World War II. A letter from the Secretary of the Interior, dated Oct. 27, 1952, granted permission for the military to retain jurisdiction over withdrawn lands until they were not needed for military use. From 1955 to 1965, the Department of the Army released approximately 10,000 acres to various entities such as the US Air Force, State of Alaska, and the Bureau of Land Management (BLM), and acquired approximately 6,000 for Army use. From 1966 to the present, Fort Richardson's boundaries have remained fairly stable. Leases from the BLM have expanded the boundary to the east and in the south.

1.3.3 Installation History

"If we would provide an adequate defense for the United States, we must have . . . Alaska to dominate the North Pacific."

With these words William Henry Seward argued with Congress for the purchase of Alaska. Seward, then Secretary of State under Presidents Lincoln and Johnson, favored the purchase and was successful in his arguments.

Russia was willing to sell; ninety days after the United States received the offer, the treaty was accepted (June 30, 1867).

³ The majority of historical information found within this section was obtained from *Alaska Centennial* (Roberts, 1967).

Alaska was proclaimed by President Johnson to be the nation's newest territory, 586,400 square miles, at a total cost of \$7,200,000.

Secretary of War Edward M. Stanton and Major General Henry W. Halleck, commander of the Military Division of the Pacific, proposed that troops arrive at their new stations no later than July to prepare for what would obviously be a demoralizing winter. Troops were not immediately available, however, and the occupation did not take place until October 18, 1867.

The new Military District of Alaska was to be directly responsible to the Military District of the Pacific, but Brevet Major General Jefferson C. Davis was notified that the isolation of his command would call for his nearly complete jurisdiction and decisive action.

At 11 am on October 18, 1867, the USS Ossipee steamed into Sitka Harbor carrying General Davis, his staff, and artillery. General Davis and Prince Maksoutoff, Russian governor of the territory, met and agreed that the ceremony for transferring the land would take place on that cloudy but pleasant afternoon at 3:30 pm at the governor's house. At 3 pm the Russian Company, under command of Captain Hebrousky, assembled in front of the governor's house to the right of the flagstaff. The United States troops disembarked from the transports, and as soon as the soldiers were landed, General Davis, with the guard of honor, proceeded to the governor's house, taking positions to the left in front of the flagstaff. As the main body of two hundred American soldiers filed past, the Russian troops presented arms. The Americans returned the salute and took their positions to the left of the Russians. At 3:30 pm Prince Maksoutoff and the commissioners appeared. Taking their position near the flag, they were saluted by the military. Captain Pestchouroff gave the signal to lower the Russian flag, at which time the troops were brought to present arms. As the flag was being lowered, the Americans fired the first round of a twentyone gun salute. A moment later this shot was answered by the first round fired from the Russian battery. The guns fired alternately until twenty-one rounds were fired by each. At the completion of the salute, Captain Pestchouroff turned to General Rousseau and said, "By the authority of his majesty, the Emperor of all Russians, I transfer to you, the agent of the United States, all territory and dominion now possessed by his majesty on the continent of America and in the adjacent islands, according to a treaty made between these two powers."

General Rousseau accepted, and the flag was placed upon the staff. George Rousseau, the 15-year-old son of the General, raised the Stars and Stripes over the heads of representatives of the two mighty nations. A Russian battery blasted a salute, and it was answered by the thunder of one of the US ships. Again they fired alternately until they had completed the National Salute.

The events that followed that winter, and in the years before the turn of the century, formed much of the proud tradition of the Army in Alaska.

Brevet Major General Jefferson C. Davis and his command were immediately faced with the tasks of not only administering the government but of learning to survive the cruel Alaskan winter.

On October 29, 1867 General Davis assumed command of the Military District of Alaska with headquarters at New Archangel (now Sitka) and announced the jurisdiction of the United States over the great territory.

In the spring, the Department of Alaska became the District of Alaska under the Military Division of the Pacific with five posts to be established. Among the post sites selected were Fort Kodiak and Fort Kenay (Kenai) on Cook Inlet.

Since the government had not yet organized civil authority in the territory, it became the duty of the military authorities to give protection to the inhabitants and their property.

Military authority in this area was intelligently withdrawn according to plan as the villages in southeastern Alaska developed. On July 1, 1870, the Department of Alaska was discontinued and the territory was attached to the Department of the Columbia. General Davis and his staff returned to the states.

The army continued jurisdiction in Alaska until 1877 when all troops were withdrawn and responsibility for the territory passed into the hands of the Treasury Department, which had special interests in the commerce of fur and fisheries.

Although Army troops were withdrawn from the territory, the Army did not lose its interest in this vast region of the North. The Signal Corps was operating weather stations as early as 1876, and exploration parties criss-crossed the land.

In 1881, First Lieutenant Patrick Henry Ray and nine men reached Point Barrow, and from this base, explorations were made inland to points never before reached by civilized man. General Greely, then a young lieutenant, came to Alaska in 1882 to direct an Arctic exploring expedition in the territory that was still often referred to as "Seward's Folly." In 1883, a military party was charged with making a reconnaissance from Chilkoot Inlet to Fort Sekirk on the Yukon River. This party traveled the entire length of that great river in a trip that took three months. In 1884, a reconnaissance was made of the Copper River and explorations continued in the area of Valdez. The next year a party made an exploration trip up the Copper River and down the Tanana Valley with a side trip to Nulato and the Koykuk River before descending the Yukon to St. Michael to end the trip.

Meanwhile the gold rush had brought thousands of ill-equipped hopefuls to Alaska, and fears were raised as to actual and threatened lawlessness. In August 1897, two advance military men were sent by the Secretary of the Army to ascertain the conditions in Alaska and to determine whether troops would be required to maintain law and order.

Largely through their recommendations, the Army came back to Alaska, in force, in 1898, and again assumed many of the responsibilities of civil government.

Many of the names of early Army explorers have been immortalized in Alaskan place names. The community of Glennallen, the Glenn highway, and the Richardson highway are examples

Returning to Alaska during the gold rush, the Army established posts in southeast Alaska at Valdez and along the Yukon from St. Michael to Eagle City. By 1910, however, civil government had become established and the Alaskan garrison was reduced to less than a regiment. The Signal Corps had remained active and in 1902, men like Lieutenant William Mitchell crossed Alaska on foot, building its network of lines that were to become the Alaskan Communications System.

The development of this communications system drew the populated sections of the territory together and connected them to the continental United States. This may have been of greater and more lasting value to Alaska than all of the benefits derived from the discovery of gold.

Electronic communication was not the only successful enterprise of the Army in the beginning of the 20th century. Working out of Valdez, a party under Captain Abercrombie laid out and built the first major road in the territory—a military road from Valdez to Fairbanks, now known as the Richardson Highway. The Alaska Railroad was authorized by Congress in 1914. The railroad was initially a Department of the Interior project, but its construction was under the supervision of Army Lieutenant Colonel Frederick Mears. Army Engineers laid out the railroad town which was to become Anchorage.

World War I scarcely touched Alaska, but 2,223 Alaskans were drafted and an estimated 1,500 others went to the south 48 to enlist.

Between World War I and World War II, Army strength in Alaska declined. All Army posts but one in the territory were abandoned by 1925.

In 1939, increasing world tensions caused the establishment of Elmendorf Field just outside of Anchorage. One year later, the name Fort Richardson was adopted by the US War Department in memory of Brigadier General Wilde P. Richardson, a Texas engineer and 1884 West Point graduate who served three tours of duty in the rugged Alaska Territory between 1897 and 1917. During this time, General Richardson commanded troops along the Yukon, supervised construction of Fort Egbert near Eagle and Fort William H. Seward near Haines, and served as commander of the American Expeditionary Force, North Russia. As head of the War Department's Alaska Road Commission during 1905–1917, he was responsible for much of the surveying and building of early railroads, roads and bridges that helped the state's settlement and growth. The Valdez-Fairbanks trail, surveyed under his direction in 1904, was named the Richardson Highway also in his memory.

Japanese aggression in the Aleutian Islands emphasized the strategic importance of Alaska. Fort Richardson's first mission was defense of southern Alaska by establishing a permanent air base, supply depot, and garrison. When the Japanese attacked Pearl Harbor in 1941, Fort Richardson was charged with defending Alaska from invasion and coordinating the Alaskan war effort. Before the outbreak of World War II, military strength in Alaska was less than 3,000; it soon grew to 7,800 troops stationed at Fort Richardson alone, including the 4th Infantry, 81st Field Artillery, and 75th Coast Artillery (Anti-Aircraft). As the war progressed, Fort Richardson's mission expanded significantly as the logistics base for numerous Army garrisons and the Air Corps.

Army activity in Alaska during World War II contributed greatly to the growth of the territory by the great influx of soldiers and civilian workers and the countless millions of dollars spent on construction. The highlight of this period was the building of the Alaska Highway. This epic task, performed by the Corps of Engineers, gave the territory its only overland link with the rest of the world.

After World War II, the US Department of Defense (DOD) reduced military forces in Alaska. Fort Richardson and Fort Wainwright (known at that time as Ladd Army Airfield) were the only two DOD installations in Alaska not placed on housekeeping status. Nevertheless, Fort Richardson relinquished much of its training lands, with over 80,000 acres of training and maneuver lands, and over one million acres of bombing ranges being excessed. In addition, approximately 13,000 acres was transferred to the Air Force (see Figure 1-2).

Army troops were redesignated as the United States Army Alaska (USARAL) on November 15, 1947, and assigned to the Alaskan Command, the nation's first unified command staffed jointly by Army, Navy, and Air Force officers.

Headquarters for USARAL were established at Fort Richardson. At that time the post was located on what is now Elmendorf Air Force Base. After the establishment of the Air Force as a separate service in 1947, the Army post was rebuilt on its present location in 1950. The early 1950s saw an intensive building program designed to make the post more livable. More permanent barracks, family quarters, warehouses, a service club, underground utilities and a power plant were built. Also, the first streets were paved, the post was landscaped, the first of four school buildings sprang up and the gymnasium and theater were completed. It was the largest and most modern of Alaska's Army installations.

Three off-post Nike-Hercules missile sites were built in 1959. That December, one of the mighty missiles atop Site Summit (Mount Gordon Lyon) was test fired, marking the first time a Nike Hercules had been fired from an actual operational location. The missile unit was inactivated in July 1979, after more than 20 years of defending the skies over Anchorage.

By 1960, most of the fort's major facilities had been built, including a health and dental clinic, commissary, post exchange and officer and NCO clubs. In 1961, female soldiers were assigned to the post for the first time since World War II. Also that year, the United States Modern Biathlon Training Center was established at the fort. The facility, which trained military and civilian athletes in the Winter Olympic event that combines cross-country skiing and rifle marksmanship, was phased out in 1973.

When the Good Friday Earthquake struck on March 27, 1964, Fort Richardson's soldiers swung into action, performing rescue missions in Anchorage and throughout the state. More than 1000 soldiers were in the Anchorage area within two days, supplying food, water, communication and medical supplies to the injured and homeless. The post became the focal point of rescue operations for the state for almost three weeks. For some outlying communities, Fort Richardson was the only link to the outside.

The post itself suffered an estimated \$17 million in damages, minor compared to that of other areas. However, the Skyline Military Service Club was nearly destroyed and one man was killed when a section of the building collapsed.

In 1969 and again in 1971, Fort Richardson was presented the Secretary of Defense Citation of Meritorious Achievement in support of the Natural Resources Conservation Program. Also in 1969, the post received the "Conservation Organization of the Year" award from the Secretary of the State of Alaska, who commended the post for outstanding achievements in wildlife conservation education and its active scientific research and management of game. That commitment to wildlife enhancement continues today and many species, including moose, bear, fox and eagle, are permanent or transient residents.

In December 1974, as part of worldwide realignments, USARAL was inactivated and the post became headquarters for the 172nd Infantry Brigade (Alaska) in January 1975. As in previous years, subordinate posts were maintained at Fort Wainwright, near Fairbanks, and Fort Greely, near Delta Junction.

In a subsequent realignment in March 1986, the 172nd gave way to the 6th Infantry Division (Light) and United States Army Garrison, Alaska. This marked a new mission for the Army in Alaska as a light, deployable force capable of defending United States interests across the globe. The division became aligned more closely with the Defense Department's forces in the Pacific when, in 1989, it began reporting to the US Army Western Command in Hawaii (later re-designated United States Army Pacific).

In 1990, headquarters for the 6th was moved to Fort Wainwright. In 1993, as part of Army-wide downsizing, the 6th was selected to be reorganized as a light infantry brigade.

The 6th Infantry Division (Light) was inactivated July 1994, and Fort Richardson became headquarters for United States Army Alaska (USARAK). In 1998, the 1st Brigade, 6th Infantry Division (Light) was deactivated, and the 172nd Infantry Brigade was reactivated.

1.3.4 Historic Natural Resources Program Development

"Alaska was satisfying on so many levels that I almost was ashamed to collect my pay . . . wilderness rivers, pristine streams . . . unspoiled wilderness,

Reports on Fort Richardson's conservation program date back to at least 1963 (Fort Richardson, 1963). There have been at least six other such reports since then.

1.3.4.1 Forest Management

Forest management on Fort Richardson dates to 1955 when mapping of forest types was completed on the post (Quirk, 1990). This mapping delineated forest stands for management purposes. Given the low commercial potential of forests on Fort Richardson, forest products have been harvested only when required for specific military or natural resources management purposes. Since the 1950s, firewood and Chtristmas trees have been harvested on a limited annual basis.

1.3.4.2 Fish and Wildlife Management

Fish and wildlife management on Fort Richardson predates statehood, beginning in the mid-1950s when the first steps were taken toward fish management. In 1953, the first of rainbow trout (Onchorynchus mykiss) were stocked in a few post lakes. Stocking since has continued annually. Two years later, a land management plan was drafted that included provisions for fish and wildlife management (Gossweiler, 1984). In 1956 and 1957, wild rice was sown by helicopter on ERF to improve waterfowl habitat. This was successful, and wild rice became established in the marsh (Fort Richardson, 1963).

In the 1950s and 1960s, post commanders sent over 60 soldiers to a special fish and wildlife management course offered by the University of Alaska (Fort Richardson, 1963). Responsibility for overseeing conservation activities was assigned to an enlisted military conservationist (Quirk et al., 1978). Fish and wildlife management on the post was expanded following the signing of a cooperative agreement with the Bureau of Sport Fisheries and Wildlife and ADF&G in 1960. The agreement called for the establishment of a fishery on Fort Richardson using the cooling pond at the post power plant to raise fish collected from a local hatchery. Stocking efforts quickly expanded to include steelhead trout, kamloop trout, silver salmon, and king salmon. Major improvements for fish habitat were made to post impoundments and waterways. These included removing undesirable fish and vegetation from Otter Lake, and constructing fish ladders for salmon on Ship Creek. Following the agreement, limited and largely inefficient efforts were made to monitor the moose population on the post, and moose hunts were occasionally scheduled (Fort Richardson, 1993).

With mechanized troop training in the 1940s and 1950s, ground disturbance led to the establishment of early successional species preferred by moose, such as aspen, willow, and birch. These ground disturbing activities inadvertently compensated in part for unmitigated habitat loss associated with development of cantonment and other infrastructure. This resulted in greater numbers of moose on the post. With mission changes to less ground-disturbing light-infantry training, Natural Resources Branch personnel took measures to maintain moose habitat.

In 1963, Fort Richardson published A Report on Fish and Wildlife Conservation Activities. Besides describing ongoing activities, it called for an increase in recreational opportunities for fishing and hunting (Fort Richardson, 1963). In 1965, Fort Richardson began to investigate preferred plant species for moose browse. In 1972, the post hired a civilian Natural Resources Specialist as part of a new environmental team, which also was responsible for the other lands under the Alaska Command (Quirk et al., 1978). The post acquired two Hydro-Axes[™] in 1975 to cut overmature and decadent woody vegetation and to stimulate moose browse production (Gossweiler, 1984). Besides using a Hydro-Ax[™], Fort Richardson

⁴ Gen. H. Norman Schwarzkopf from "It Doesn't Take a Hero"

initiated clear-cutting in 1979 (Gossweiler, 1984). In that year, more than 100 acres of mature vegetation were clear-cut, and during 1976–1980, roughly 150 additional acres were cleared for moose (Bennett, 1982). In 1978, natural resources specialists from the three Alaska Command installations collaborated to draft a Natural Resources Conservation Program (Quirk et al., 1978). The first wildlife management plan for Fort Richardson was completed in 1982 (Bennett, 1982); followed by the first natural resource management plan in 1984 (Gossweiler, 1984).

Management of moose became a major natural resources challenge for the post during the 1980s. Accidents on the Glenn Highway between automobiles and migrating moose led to the fencing and lighting of the highway and establishing of a special underpass for moose at the Ship Creek bridge. An annual moose monitoring program also was initiated. Wildlife management expanded in the 1980s with special studies and habitat improvements for waterfowl in ERF, McVeigh Marsh, and a number of lakes. Monitoring of non-game birds and mammals was also initiated.

By the early 1990s, waterfowl mortality in ERF emerged as the most significant natural resources issue on the post. A series of intensive evaluations and remedial investigations (CH2M Hill, 1994b; Racine et al., 1993) followed, and in 1994, EPA placed Fort Richardson on the National Priorities List. Management of moose continued to improve in the early 1990s. In 1992, the post drafted a cooperative agreement (unsigned but used) with ADF&G for moose management which underscored the importance of the species in the Anchorage area and the need for habitat development, maintenance, and enhancement.

During the mid-1990s, a closer working relationship was forged between USARAK and the BLM which resulted in a more solid, effective approach to protection and mitigation of natural resources.

1.3.4.3 Land Management

Until recently, programs other than Fish and Wildlife or Forestry were lumped together as Land Management within the Army program classification system. In 1994, ITAM was initiated on USARAK lands beginning with the Land Condition Trend Analysis (LCTA) program. The GIS was established in 1993, and by the summer of 1995, a GIS operator was contracted. ITAM supersedes programs for erosion control and project siting associated with previous land management plans dating from 1955 (Gossweiler, 1984). Since 1982, land management has been included as part of Fort Richardson's natural resources management program (Bennett, 1982; Gossweiler, 1984). Chapter 4, Section 4.1 describes the ITAM program in more detail.

1.3.4.4 Fort Richardson 1998 – 2002 Integrated Natural Resource Management Plan

This current INRMP is an update of the 1998-2002 Fort Richardson INRMP. During 1998-2001, many of the proposed projects in the 1998 plan were funded and implemented on Fort Richardson. This INRMP continues to carry out many projects for the enhancement of natural resources on Fort Richardson.

1.3.4.5 Organizational Status

In 1972, Fort Richardson's Commander delegated responsibility for environmental and natural resources management to a new Environmental Office within the Directorate of Engineering and Housing (now DPW) (Quirk et al., 1978). A Sanitary Engineer (GS-12) was hired to head the office with a staff including an Environmental Specialist (GS-09) and a Clerk/Typist (GS-04). As the office was also responsible for Fort Wainwright and Fort Greely, Natural Resources Specialists (GS-11) were hired on each of the three posts (Quirk et al., 1978). In the 1980s, the Environmental Resources Office expanded to

become a division within DPW, and USARAK Natural Resources was granted Branch status. Current and projected staffing of the Natural Resources Branch is discussed in Chapter 8.

1.4 Military Mission

The Spirit of the "Arctic Light"

"We train to the highest standards in the toughest environment in the world—we are ready to go anywhere in the world within 18 hours—there is nothing that we cannot handle when we get there—we are up to it." 5

The United States (US) Army must maintain the capability, through a total force effort, to put overwhelming land combat power on any future battlefield and defeat any potential enemies. A decisive victory depends on the ability to deploy rapidly, fight, self-sustain, and win quickly with minimum casualties.

In the 21st Century, the Army faces unprecedented challenges to its ability to train. Increased environmental regulation of training lands and ranges, coupled with increased economic development around Army installations all contribute to a more challenging training climate. A sound land management program that provides economical and acceptable planning and execution is mandatory to protect that land as an essential asset for training.

Implementing this INRMP provides a sound land management program that conserves land as an essential asset for training, provides excellent stewardship, complies with environmental laws and provides recreation opportunities that contribute to quality of life.

1.4.1 Overview

1.4.1.1 USARAK Mission

For more than 50 years, members of the United States Armed Forces have trained at Fort Richardson, gaining skills needed to win on battlefields of the world. The mission of Fort Richardson has changed over the decades . . . from defense of Alaska in World War II . . . to defense of the nation with the development of intercontinental missiles . . . to providing an oil pipeline to support the Vietnam War . . . to today's peacetime mission.

USARAK's current mission is to command and control United States Army forces in Alaska and to provide the services, facilities and infrastructure to support power projection and training to rapidly deploy Army forces from Alaska in the conduct of contingency operations within the Pacific theater and elsewhere as directed.

1.4.1.2 USARAK Population and Major Troop Units

Fort Richardson is headquarters for the major support element of USARAK, the Arctic Support Brigade, as well as the garrison staff. The primary combat unit at the fort, 1st Battalion (Airborne), 501st Infantry, along with smaller supporting engineer, signal, military intelligence and artillery units, form a readily deployable combat task force in support of the 172nd Brigade (Separate) headquartered at Fort Wainwright.

⁵ Lt. Gen. L.E. Boese

Soldiers stationed at Fort Richardson learn the skills of arctic survival and master over-snow travel, tundra crossing and glacier and riverine techniques along with their standard military specialties. The command holds extensive field training exercises in Alaska and participates in USARPAC exercises in the Pacific.

Fort Richardson is authorized 2,175 soldiers, who along with approximately 3,800 family members reside on post or in the adjacent communities of Anchorage, Eagle River and Palmer. The fort employs about 1,050 Army and DOD civilian employees.

1.4.1.3 Anticipated Changes in Military Mission

The Army's impending transformation may bring about a change in the military mission in Alaska. In response to the changing operational environment facing the nation and the Army during the 21st Century, the Chief of Staff and Secretary of the Army announced a new Army Vision in October 1999 to build a landpower force capable of strategic dominance across the full spectrum of operations. The Vision establishes an explicit requirement for the Army to become more strategically responsive. The Army will implement the Vision by means of a three-stage transformation campaign over the next 10-20 years, leading to the establishment of an Objective Force that will incorporate revolutionary improvements in capability over the current force. The Army Transformation Campaign Plan represents the most challenging and significant effort to change the Army in a century. The Interim Brigade Combat Team (IBCT) represents the vanguard of that future force.

The IBCTs, operating within division structures, will provide a complementary capability to our current light and mechanized forces, serving as a bridging force until science and technology allow the Army to achieve Objective Force capabilities. The major fighting components of the IBCT are three motorized, combined arms infantry battalions, supported by additional organic combat, combat support, and combat service support organizations, described further below. To meet its demanding deployment threshold, the brigade's design uses common vehicle platforms, including highly-mobile, medium-weight interim armored vehicles (IAV) coupled with the deliberate minimization of the personnel and logistical footprint in theater.

If Alaska is chosen as an Army transformation site during 2002-2006, USARAK will encounter a change in military mission. The impact of more vehicles that are highly mobile may necessitate the preparation of a Mission Transformation Environmental Impact Statement for USARAK.

1.4.2 Relationships Between Natural Resources and the Military Mission

At present, Fort Richardson is capable of supporting its military mission. It should be noted, however, that its ability to continue functioning as such is linked directly to its current land and natural resource base. Significant loss of lands and natural resources for a myriad of non-military uses has placed Fort Richardson at the threshold of adequacy for supporting its mission. Any future losses threaten its viability and should be contested strongly.

In many respects, USARAK's mission is highly dependent on natural resources, but at the same time it is moderately taxing on some of those resources. The LRAM program mitigates some damage caused by this mission, and other ITAM programs within this INRMP will prevent or reduce future damage.

Recent reductions in troop strengths, and in the amount of tactical training needed to support these troops, have resulted in significant land improvements. Pending no further land or resource losses, it is

anticipated that Fort Richardson, by instituting these progressive land rehabilitation methodologies, will continue to provide a sufficient arena for current and future mission requirements.

1.4.2.1 Effects of the Military Mission on Natural Resources

The conservation of natural resources and the military mission will not be mutually exclusive.⁶

Fort Richardson's broad mission entails a variety of military land-uses. Over the years, mechanized infantry, artillery, special forces, and assault aircraft personnel have trained at Fort Richardson. Damaging effects of military missions primarily result from one of two sources: munitions impacts and maneuvers. Impact damage occurs within 2,195 acres of designated impact area in Eagle River Flats (ERF). Munitions can damage soil, vegetation, and wildlife upon impact. Other sources of damage from impact include proliferation of shrapnel and toxic residues. Military munitions fired into ERF include: 107 mm, 81 mm, and 60 mm mortar rounds, 155 mm and 105 mm howitzer rounds, 90 mm recoilless rifle rounds, 66 mm Light Anti-tank Weapons, 40 mm grenades, Shillelagh missiles (isolated), flares, and small arms rounds (CH2M Hill, 1994b). Most projectiles fired onto ERF are high explosive; however, smoke and illumination rounds are also fired. White phosphorous rounds are no longer used at Fort Richardson.

Maneuver training on Fort Richardson involves the use of heavy cargo trucks, High Mobility Multipurpose Wheeled Vehicles (HUMV), Armored Personnel Carriers (APC), light-weight tracked vehicles known as Small Unit Support Vehicles (SUSV), and snow machines in winter. The most severe and widespread damage from maneuvers occurs under conditions where soil has become saturated either by excessive rainfall during summer or during and immediately after break-up (usually in April) when the winter snowpack is melting.

Damage includes rutting and vegetation destruction from cross-country travel. On secondary roads, damage results from deep rutting and liquefaction of silty materials underlying roadbeds. Liquefaction can result in the formation of large craters in secondary roads. Damage on combat trails is primarily due to rutting.

In bivouac areas, ruts form under wet conditions where vegetation has been removed or destroyed. Other, less severe, damage in maneuver areas results from training activities that involve routine ground disturbance and damage or destruction of vegetation. Repeated use of firing points and bivouac sites often results in almost complete removal of shrub vegetation by heavy vehicular traffic. Earth-moving activities associated with training often result in areas denuded of vegetation that are difficult to restore. Some examples of these are open foxholes and tank traps.

Impacts associated with maneuver training in winter result from using heavy equipment to clear snow from trails and bivouac areas. Often, grader and dozer blades are lowered beneath the snow, scraping topsoil and vegetation into berms, which take several years to become revegetated. The resulting unsightly mounds and rough terrain remain evident for many years.

Military training can also affect wildlife. Potential impacts include:

- Wildlife becoming entangled in concertina and communications wire which often results in death or serious injury
- Loss of habitat and habitat fragmentation
- Wildlife drinking antifreeze containing ethylene glycol or being exposed to other toxic materials

⁶ AR 200-3, Natural Resources-Land, Forest, and Wildlife Management, para 2-11.

- Distruption of natural wildlife movement patterns
- Soldiers either intentionally or inadvertently harassing or otherwise causing harm to wildlife
- Wildlife falling into unfilled holes
- Wildlife being artificially attracted to areas as a result of unsanitary or poor "housekeeping practices"

US Army Alaska Regulation 350-2 requires all soldiers to pick up concertina and communications wire, clean up all trash, fill in holes, and specifically restricts harassing wildlife.

The noise of military training is often believed to affect wildlife. Sources of noise on Fort Richardson may include firing and detonation of munitions, low flying aircraft, construction activities and general troop maneuvers (both mechanized and pedestrian). Numerous studies have indicated that the introduction of noise into previously undisturbed areas can initially cause behavioral changes and stress in some species of wildlife. But over an extended period of time these effects wane as wildlife becomes accustomed and habituated to the recurring disturbance. Observations of wildlife on Fort Richardson support this general statement that noise is of little significance.

Unexploded ordnance found outside impact areas as a result of firing activities in the early days of the post may pose some threat to those who use the post for military training or natural resources-based recreation. However, there is no evidence that this threat is significant or common.

1.4.2.1.1 Past Mission Impacts on Natural Resources

The withdrawal of land (through BLM) for Fort Richardson had a long-term positive effect on natural resources, as the area likely would have otherwise been enveloped by the expansion of Anchorage. Most of the land outside of the cantonment area was left undeveloped, affected only by training impacts. In 1970, Fort Richardson adopted a policy of actively conserving natural resources. A biologist was hired to initiate a land management program, which has grown steadily and has resulted in positive impacts on natural resources.

Impacts to natural resources on Fort Richardson have been consistent with trends at other DOD holdings. The Unit Leader's Handbook for Environmental Stewardship (Department of Army, 1994) lists six primary consequences of intensive and continuous use of Army training lands:

- The loss of historical sites, vegetation, water resources, and wildlife
- Diminished quality of available realistic training areas
- Diminished operational security
- Ineffective tactical operations
- The creation of safety hazards to personnel and equipment
- An increase in training, maintenance costs, and litigation

On Fort Richardson, the first and last items have been most significant.

The most significant mission impact to date is munitions residues in wetlands, resulting in loss of wildlife, loss of training assets, and high research and mitigation costs. In their evaluation of this problem in ERF, USARAK was the first to recognize the danger of white phosphorous to wildlife and has been a leader in the study and treatment of adverse effects of military training on wetlands.

In 1980, USARAK personnel on Fort Richardson noticed an unusually high mortality of waterfowl in the ERF Impact Area. This discovery led to a series of investigations that spanned fourteen years and a study of military impacts on a scale unprecedented on other installations. The investigation was coordinated by

a five member interagency task force focused on the relation between munitions residues and waterfowl mortality. By 1994, 36 separate studies had been conducted by seven government agencies and laboratories (CH2M Hill, 1994b). These studies produced the following conclusions:

- White phosphorus residues from certain munitions caused waterfowl mortality
- White phosphorus posed the greatest threat when concentrated in sediments
- White phosphorus contamination was not spreading significantly to other areas
- Other munitions residues were not causing waterfowl mortality (CH2M Hill, 1994b)

In 1990, live-firing into ERF was suspended pending further study. It was reinstated two years later under the following USARAK-imposed conditions:

- No firing of white phosphorus munitions
- A minimum of 6 inches of ice or frozen ground must cover ERF
- Firing is allowed only between November 1 and March 31
- Only point contact detonators are used

In addition, as a result of this study the Pentagon issued a nationwide memorandum prohibiting the firing of white phosphorus munitions in wetlands.

In 1994, ERF was included on the US Environmental Protection Agency's National Priorities List. USARAK is now pursuing strategies for remedial solutions to white phosphorus contamination (CH2M Hill, 1994b).

1.4.2.1.2 Present Mission Impacts on Natural Resources

USARAK is minimizing the potential for additional environmental damage to the impact area by initiating firing restrictions and remedial actions on ERF. Maneuver activities are now the largest potential source of damage on the post, though not on a large scale. The actions of combat engineer units are another source of damage associated with maneuvers. One such problem during years of high snowfall is damage to soil and vegetation by plowing snow from frequently used training sites. In 1994, USARAK began efforts to counteract the cumulative effects of military training impacts by establishing an Integrated Training Area Management (ITAM) program.

The USARAK military mission fosters relatively healthy, stable ecosystems. The most basic and significant reason for this is found in the very nature of the infantry's use of the land. While infantry-related exercises may cause localized damage, they very seldom threaten ecosystems or biodiversity. This is especially so in Alaska where impacts are, for the most part, small and of short duration. The only exception being damage to the alpine tundra which takes long periods of time to recover. USARAK being well aware of the delicate nature of the alpine takes every precaution to avoid causing damage.

Fort Richardson continues to preserve native ecosystems by preventing rampant development and municipal expansion. Natural resources management considerations and safety demands associated with the training mission limit the extent of other potentially damaging land-uses. The diverse, self- sustaining natural resources found on Ft. Richardson attest to the success of its conservation efforts. The post is an important wintering ground for moose and staging area for migrating waterfowl, and provides habitat for hundreds of other native plants and animals.

1.4.2.2 Effects of Natural Resources or Their Management on the Military Mission

Military training is affected by limitations imposed by natural resources on Fort Richardson. Most limitations involve wetlands protected by Executive Order (EO), federal and state laws, and Army policies.

The elimination of all white phosphorous munitions use was imposed on Fort Richardson in 1991. White phosphorus is commonly used to mark targets for air strikes. Without its use the Army and Air Force must rely on lasers. Another impact to the military mission is artillery units that normally trained at Eagle River Flats have had to travel to Fort Greely and Donnelly Training Area for training now restricted on Fort Richardson.

Fort Richardson is minimizing the potential for additional environmental damage by implementing restrictions on firing and seasonal use as listed below. Few of these restrictions cause significant impacts on the military mission.

- Use the summer and winter environmental limitations overlays that protect high function wetlands and sensitive wildlife habitat
- Restrict helicopter flight zones to a minimum 500-foot flight level to avoid inadvertent harassment of wildlife

Other limitations on training are imposed by terrain characteristics. Dense black spruce forests and wetlands, such as those found in North Post, are difficult barriers around which to maneuver. However, terrain features offer realistic challenges to small unit maneuver, and learning to navigate through them is valuable training.

1.4.3 Future Military Mission Impacts on Natural Resources

Future military mission impacts will be addressed in the Mission / Transformation Environmental Impact Statement. This EIS will address the regular ongoing impacts of the current mission as well as the predicted impacts of the transformation of the 172nd Brigade (Separate). The impacts of the maneuver mission will be predicted using the Army's ATTACC methodology.

1.5 Joint Management and Stewardship

Joint management refers to Congressionally directed shared responsibility by the Bureau of Land Management (BLM) and that Department of Defense (DoD) for organizing, controlling, and supervising activities on certain withdrawn federal lands. Joint use may, or may not, also involve joint management. Both joint use and joint management require joint stewardship.

Joint stewardship refers to the working relationship entered into between USARAK and BLM for the care of withdrawn federal lands in Alaska and associated resources used by USARAK for military mission requirements.

The United States has adopted an international political and military strategy that requires the nation's military forces to be ready to deploy on short notice for engagement anywhere in the world. The American people rightly expect these forces to be highly trained and equipped with the highest-performance materiel and technology available. Ready, capable forces result from constant training; and new or modified weaponry and other equipment must be field-tested before being placed with the using units

Because of the speed and maneuverability of modern armaments, today's and tomorrow's armed forces require large tracts of land for training and weapons testing. Changes in tactical doctrine and weapons technology designed to dissuade any would be aggressor, and to win battles and minimize casualties to American and allied forces in the event of armed conflict, are increasing the need for such land despite reductions in the size of the US military since the Cold War and the closure of some military installations.

The majority of the land currently used by USARAK is on long-term or indefinite withdrawal from public domain lands originally assigned to the Department of the Interior's (DOI) Bureau of Land Management (BLM). Provisions for management of these lands are generally specified in each of the Public Laws, Public Land Orders, Executive Orders, and other enabling documents.

Whenever the military uses a tract of public land originally assigned to another agency it incurs legal and moral responsibilities for the stewardship of the land and its resources. Residual responsibility for USARAK withdrawn lands remains with BLM, who retains interest in the stewardship of the transferred parcel, even though the land is under DoD's long-term management.

The reason USARAK land is withdrawn from other public use to the military is to enhance military readiness in the interest of national defense. If the land were intended to be managed primarily for multiple uses, it would not be managed by a military service. Under USARAK management, land is used primarily for national security purposes (e.g., training and testing), but will also be managed to accommodate additional uses as long as they do not impinge on the primary military readiness mission. For instance, USARAK manages lands with many of the same protections as wilderness land or wild and scenic rivers. A Wilderness Designation or a Wild and Scenic Rivers Designation, however, would be incompatible with the intent of the military land withdrawals and the military training mission.

Multiple use of the lands they manage is an integral part of the mission of the BLM. As defined by FLPMA, multiple use implies that each authorized use of the land has an equal level of priority. DoD, on the other hand, is a single-mission agency. As such, it has a single, mission-oriented use for the land it manages: military readiness for national defense. The quality of life of DoD's personnel is also an important component of DoD's national defense mission. In support of their specific missions, DoD's services and agencies implement a variety of land management practices on their installations that support military readiness and quality of life programs. For DoD, therefore, multiple use is *an approach to land management* rather than an element of its mission. A variety of land management tools such as hunting, fishing, nature trail maintenance, watchable wildlife programs, and the maintenance of groomed open spaces may be used in the INRMP in support of both quality of life programs and military training and testing requirements. By using a mix of these land management tools, DoD undertakes a multiple use approach to land management while still meeting the single mission use of the land (military readiness for national defense). An important aspect of this particular multiple-use approach to land management, however, is that it is employed only to the extent that it does not conflict with the military training and testing components of the overall national defense/readiness mission of the agency.

As noted earlier, where withdrawal legislation specifies joint management, collaboration between BLM and DoD is essential. Stewardship, however, is an inherent responsibility of anyone who has activities on the land regardless of legislated land management responsibilities. Stewardship implies acting responsibly in the public interest in the use and, as appropriate, restoration, improvement, preservation, and protection of federal lands and their associated resources. Good stewardship is a fundamental policy of all land management agencies and a mandate for all users of the land.

1.6 Responsibilities

USARAK is the agency with primary responsibility for military uses of the withdrawn lands in Alaska. Per the Sikes Act, USARAK is responsible for preparing, updating, and implementing this INRMP. Since all uses and projects described in this plan support the overall military mission, implementation of this plan is defined as a military use. BLM retains stewardship responsibilities and is responsible for all non-military uses on designated withdrawals. BLM is the interface with the public for all requests for resources on withdrawn lands. BLM – Alaska Fire Service (AFS) is responsible for fire suppression on USARAK lands. USFWS and ADF&G are responsible for the management of fish and wildlife populations on USARAK withdrawn lands.

The Cooperative Agreement (Appendix B) between USARAK, USFWS, ADF&G and BLM details responsibilities and facilitates management of lands withdrawn for Fort Richardson. The cooperative agreement includes the following stipulations:

- USARAK and BLM will coordinate with each other on military and nonmilitary activities on Fort Richardson, with the Army responsible for NEPA documentation for military activities, and the BLM responsible for NEPA documentation for nonmilitary activities
- USARAK and BLM have responsibilities for controlling public access; USARAK will coordinate with BLM to enforce public access restrictions
- Studies conducted on Fort Richardson by agencies other than USARAK will be coordinated with BLM
- Fire management will be conducted in accordance with the *Interagency Fire Management Plan*

Within DOD, many individuals and organizations listed below have responsibilities for the overall implementation of this INRMP. Responsibilities for each program are listed in greater detail in Chapters 3–7. The Commanding General, USARAK, is directly responsible for operation and maintenance of Fort Richardson, including implementation and enforcement of this INRMP. He is personally liable for compliance with laws pertaining to implementation of this plan. The USARAK Environmental Resources Department (ERD), Directorate of Public Works (DPW), Fort Richardson, is the office through which the Commanding General, USARAK, manages natural resources at Fort Richardson. The Natural Resources Branch is the primary organization directly responsible for implementing this INRMP.

The USARAK Directorate of Plans, Training, Security, and Mobilization (DPTSM) is the organization through which the Commanding General, USARAK, manages ranges at Fort Richardson. DPTSM has responsibility for managing range complexes; coordinating military training; and releasing training areas for forestry, land rehabilitation, and recreational use. The Directorate of Personnel and Community Activities (DPCA) promotes organization and development of recreational opportunities and facilities. DPCA manages most outdoor recreation with the exception of hunting, fishing, and trapping. The Provost Marshal Office (PMO) is responsible for law enforcement on Fort Richardson. Implementation of this plan also requires the assistance of other USARAK directorates and organizations, including Directorate of Logistics (supply and transportation), Directorate of Resource Management (budget, personnel, and equipment authorizations), Directorate of Contracting (purchasing), Public Affairs (public awareness programs), and Staff Judge Advocate (legal assistance).

USARAK's higher headquarters, US Army Pacific Command (USARPAC) headquarters, located at Fort Shafter, Hawaii, will assist USARAK with development and implementation of conservation programs. USARPAC has review and approval authority for this INRMP and provides funding for implementation. The Army Environmental Center (AEC), located at Aberdeen Proving Ground, Maryland, provides oversight, centralized management, and execution of Army environmental programs and projects. It has

support capabilities in the areas of NEPA, endangered species, cultural resources, ITAM, environmental compliance, and related areas. The US Army Corps of Engineers (COE), Alaska District, assists Fort Richardson by administering contracts for outside or other agency support. It also is responsible for issuing wetland permits in accordance with Section 404 of the Clean Water Act. Waterways Experiment Station (WES) assists USARAK with wetlands management. The Cold Regions Research and Engineering Laboratory (CRREL) supports northern military installations and has an interest in natural resources management on Fort Richardson.

1.7 Partnerships

Partnership is defined as a process by which two or more organizations with shared interests act as a team to achieve mutually beneficial goals. USARAK undertakes management of its lands with a number of Federal, State, Local, and Public partners. Land management issues do not stop at property boundaries, but instead have an ecosystem or watershed dimension. All agencies are tied by policy to an ecosystem management approach to land management. Cooperative relations among the military services and other land management agencies foster regional approaches to dealing with stewardship issues that provide benefits beyond what could be achieved if each agency approached the issue separately.

1.7.1 Federal Agencies

1.7.1.1 U.S. Fish and Wildlife Service

The USFWS is a signatory cooperator in the implementation of this plan in accordance with the Sikes Act. USFWS is a partner, along with the Army and ADF&G, in the management of fish and wildlife on the post, as outlined in this plan. This INRMP supersedes this Agreement. Major cooperative efforts involving USFWS include species inventories and wetlands management, particularly within ERF. In 1987, USFWS became part of a five-member interagency task force formed to identify the cause of wildlife mortality in ERF and undertake remedial actions (CH2M Hill, 1994b). Appendix B includes specific items of cooperation between the USFWS, BLM, Alaska Department of Fish and Game, and USARAK as required by the Sikes Act.

1.7.1.2 U.S. Bureau of Land Management

BLM is a signatory partner in the implementation of this INRMP. BLM is the Secretary of Interior's authorized delegate for jurisdiction responsibilities regarding vegetative and mineral resources on specific Fort Richardson lands. These lands are identified through various PLOs and EOs (see Figure 1-2). Further, the Secretary of Interior, through BLM, reserves authority to change use and grant various rights to others to use the lands (right-of-ways, utility lines, gas, water, electric, cable, TV, sewer, telephone, fiber optics, etc.), with the concurrence of the Army. The Alaska Fire Service provides fire suppression, prescribed burning, and fire planning support to Fort Richardson. BLM also has a strong interest in the protection of cultural resources on withdrawn lands. Appendix B includes specific items of cooperation between the BLM, USFWS, Alaska Department of Fish and Game, and USARAK.

1.7.1.3 U.S. Forest Service

The US Forest Service (USFS) may be called upon to provide technical assistance for forest management on Fort Richardson. USFS is especially concerned with forest pests and wildfires on the post. In 1991, Oregon State University, in collaboration with Chugach National Forest, obtained approval to conduct a long-term forest research study on Fort Richardson. This research includes a white spruce (*Picea glauca*) regeneration study, a field transplant nursery, and an evaluation of different site preparation techniques. In

addition, Oregon State University obtained funding in 1994 from Alaska Science and Technical Foundation for reforestation studies in several regions of Alaska. USARAK has been participating in the study by providing land for field research plots representative of southcentral Alaska. The research is investigating site preparation techniques and white spruce regeneration. Fort Richardson also has a landuse permit for glacier and mountaineering training on Spencer Glacier in the Chugach National Forest on the Kenai Peninsula.

1.7.1.4 Natural Resources Conservation Service

Natural Resources Conservation Service (NRCS) conducted a soil survey of Fort Richardson that will be completed in 2001.

1.7.1.5 U.S. Environmental Protection Agency

The Environmental Protection Agency (EPA) was part of an interagency task force formed in 1987 to investigate and resolve the problem of waterfowl mortality in ERF. EPA has supported studies of contamination and its effects in ERF. The agency presently has an important role in remedial actions to rehabilitate contaminated areas of ERF. In 1994, Fort Richardson was placed on EPA's National Priorities List. EPA has other responsibilities in environmental program areas on Fort Richardson.

1.7.1.6 Office of Aircraft Services

The Office of Aircraft Services (OAS) provides reimbursable contract aircraft for implementation of this INRMP. The OAS has not been used for natural resources management on Fort Richardson due to availability of military aircraft. Military aircraft availability is declining, and OAS aircraft may be used during 2002-2006.

1.7.2 State Agencies

1.7.2.1 Alaska Department of Fish and Game

The Alaska Department of Fish and Game (ADF&G) is a signatory and cooperating agency in the implementation of this plan as required by the Sikes Act. It is also the primary state agency for fish and wildlife management at Fort Richardson. The post is part of the Cook Inlet Management Area for fisheries, and Game Management Unit 14C for wildlife. Within Game Management Unit 14C, Fort Richardson has been given its own designation as a special management area by the State Game Board. It is officially referred to as the Fort Richardson Management Area.

ADF&G has assisted in most areas of fish and wildlife management on Fort Richardson in accordance with the 1998-2002 INRMP. This INRMP supersedes this Agreement. ADF&G is also USARAK's primary partner in moose management, as described in a 1972 draft cooperative agreement (unsigned, but used by both agencies). In 1987, ADF&G joined an interagency task force for investigation and management of ERF. Appendix B includes specific items of cooperation between the ADF&G, BLM, USFWS, Alaska Department of Natural Resources, and USARAK as required by the Sikes Act.

1.7.2.2 Alaska Department of Natural Resources

1.7.2.2.1 Division of Forestry

The Alaska Department of Natural Resources (ADNR), Division of Forestry (DOF), is responsible for fire suppression on all lands, regardless of ownership, in the southern half of the state. Fort Richardson falls

within a Coastal Zone Management Unit administered by the Division. Specific concerns with regard to implementation of the INRMP include prescribed burns/fire suppression, forest pest management, and forest inventory.

1.7.2.2.2 Division of Parks and Outdoor Recreation

The ADNR, Division of Parks and Outdoor Recreation, is involved with USARAK on issues of public access and tourism within the Anchorage area. It also has an interest in joint recreational facilities projects between USARAK and the State of Alaska and the future management of the former Nike missile site as a Cold War historical and recreational site.

Since Fort Richardson's largest neighbor is Chugach State Park, the Division has an obvious interest in natural resources management on the post. Most of the southeastern boundary of Fort Richardson borders the park. Chugach State Park and Fort Richardson share interior forest, alpine, and subalpine habitats. Areas of cooperation and concern include forest management, outdoor recreation, wildlife management, fire management, and forest pest management.

1.7.2.2.3 Plant Materials Center

USARAK has entered into a cooperative agreement with the State of Alaska, Department of Natural Resources, Division of Agriculture, Plant Materials Center (PMC) for the purpose of enhancing, rehabilitating, and maintaining USARAK training lands at levels that will ensure their continued long-term use and effectiveness. The center will partner with USARAK to conduct revegetation projects and provide plant materials advice.

1.7.2.3 Alaska Department of Environmental Conservation

The Alaska Department of Environmental Conservation (ADEC) is the state's primary regulatory agency responsible for insuring the appropriate remediation of ERF. In addition, some aspects of wetlands management and water quality may fall under its jurisdiction.

1.7.2.4 Alaska Department of Commerce and Economic Development

The Alaska Department of Commerce and Economic Development (ADCED) is a state agency interested in Fort Richardson's role in supporting tourism within the Anchorage area.

1.7.2.5 Alaska Division of Governmental Coordination

The Alaska Division of Governmental Coordination (ADGC) acts as a clearinghouse for state agency review of projects and other actions. It enforces compliance with the Coastal Zone Management Act.

1.7.2.6 Palmer Soil and Water Conservation District

USARAK entered into a cooperative agreement with the Palmer Soil and Water Conservation District (PSWCD) in 1998 for enhancing, rehabilitating, and maintaining USARAK training lands to ensure their continued long-term use and effectiveness. The district historically partnered with USARAK to conduct LRAM, erosion control, and habitat management projects and will continue to do so during 2002-2006.

1.7.2.7 Universities

USARAK has contracted universities for research projects on the post. Experts from universities have provided specialized knowledge needed to effectively manage natural resources on Fort Richardson. University of Alaska facilities at Anchorage and Fairbanks are the installation's nearest resources for academic research. Over the years, the Anchorage campus has maintained a close relationship with the Fort Richardson community. Recently, researchers at the Fairbanks campus were contracted to conduct a small mammal survey on the post and contributed to a survey of vascular plants and the more common lichens and mosses.

For large, specialized needs, USARAK may request assistance from academic resources outside of Alaska. Through a Cooperative Agreement with USARAK, the Center for Ecological Management of Military Lands (CEMML) at Colorado State University (CSU) is a source of support for the development of ITAM, Geographical Information System (GIS) databases, and general natural resources inventory and management planning. CSU is also providing staff to implement ITAM, including the GIS.

1.7.3 Municipality of Anchorage

Primary interests of the city of Anchorage with regard to natural resources management on Fort Richardson are outdoor recreation, moose management, Ship Creek, and surface water and groundwater resources. The Municipality controls air quality permits which limits the ability of USARAK to use prescribed burning. The Municipality is also interested in right-of-ways through Fort Richardson for utility corridors and recreation.

1.7.4 Other Partners

The Partners in Flight (PIF) program may be useful in studying and managing neotropical migratory birds. PIF is a partnership of federal and state agencies, educational institutions, and nongovernmental organizations. The program integrates neotropical migratory bird management efforts into existing natural resource and land management programs consistent with the military mission. The program focuses on inventory, on-the-ground management practices, education, and long-term monitoring to determine changes in populations of these birds on DOD installations.

The Nature Conservancy is an important nongovernmental organization with interests in Fort Richardson's natural resources program. The Nature Conservancy (Alaska Natural Heritage Program), together with WES and CRREL, were contracted for a floristic inventory of Fort Richardson. This included investigation of possible rare plant species.

The public is a very important partner in the preparation of this plan. A public Restoration Advisory Board meeting was held on January 25, 2001 to explain the INRMP planning process and invite public comment. A notice of intent to update the INRMP was published in the both the Anchorage Daily News. This notice invited the public to provide their comments and concerns in the form of a survey, available by mail or on the USARAK natural resources web site. The public was also invited to review the draft INRMP and the FNSI, as a part of the public review period for the INRMP Environmental Assessment (EA).

1.8 National Environmental Policy Act Compliance and Integration

1.8.1 National Environmental Policy Act (NEPA) of 1969

The National Environmental Policy Act (NEPA) requires federal agencies to consider the environmental consequences of proposed major federal actions. The premise of NEPA is to provide environmental information to public officials and citizens before decisions are made and actions are taken. The NEPA process is intended to help public officials and citizens make decisions that are based on timely and scientifically accurate information. The analysis must fully disclose the environmental effects of the action and demonstrate that the project proponent and the decision maker have taken an interdisciplinary "hard look" at the environmental consequences of implementing the major federal action. Ultimately, federal agencies must use all practicable means to restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions upon the quality of the human environment.

The Council on Environmental Quality (CEQ) was established under NEPA to implement and oversee federal policy in this decision-making process. The CEQ uses the *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act* (40 CFR 1500-1508) for this function. The CEQ regulations (40 CFR 1508.9) specify that an Environmental Assessment be prepared to:

- Briefly provide evidence and analysis for determining whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FNSI).
- Aid in an agency's compliance with NEPA when no EIS is necessary.
- Facilitate preparation of an EIS when one is necessary.

In addition, according to CEQ Regulations (40 CFR 1500.2(c)), NEPA's requirements should be integrated "with other planning and environmental review procedures required by law or by agency practice so that all such procedures run concurrently rather than consecutively".

1.8.2 Army Regulations 200-2 and 200-3

AR 200-2, *Environmental Effects of Army Actions*, sets forth policies, responsibilities, and procedures for integrating environmental considerations into Army planning and decision making. It implements the CEQ's NEPA Regulations and directs installations to integrate environmental analysis as much as practicable with other environmental reviews, laws, directives, and executive orders. This regulation requires natural resource management plans be evaluated for environmental impacts (AR 200-2 Chapter 5, Section 5-3(k)). The requirements of AR 200-2 will be addressed through the preparation of an Environmental Assessment on the potential effects of implementing an Integrated Natural Resource Management Plan on USARAK lands.

AR 200-3, *Natural Resources-Land, Forest and Wildlife Management*, outlines policy, procedures, and responsibilities for the conservation, management, and restoration of land and the natural resources thereon consistent with the military mission and other applicable national policies. AR 200-3 states that "INRMPs require appropriate environmental review according to the NEPA and AR 200-2...appropriate level of documentation will be determined on an installation by installation basis." AR 200-3 further states, "It is Army policy to integrate environmental reviews concurrently with other Army planning and decision making actions to avoid delays in mission accomplishments".

1.8.3 INRMP and NEPA Integration

AR 200-2 (Chapter 2, Section 2-6(e)) states that "Environmental analysis and documentation required by this regulation will be integrated as much as practicable with other environmental reviews (40 CFR 1502.25)". Section 2-6(e)(5) identifies the following category components, "Installation management plans, particularly those that deal directly with the environment. These include the Natural Resource

Management Plans (Fish and Wildlife Management Plan, Forest Management Plan, and Range Improvement or Maintenance Plan)".

CEQ regulations suggest NEPA documents be combined with other agency documents to reduce duplication and paperwork (40 CFR 1506.4) so that agencies can focus on the real purpose of the NEPA analysis, which is making better decisions. In an effort to follow Army guidelines recommending concurrent preparation of the INRMP and its associated NEPA analysis, USARAK has prepared a single document. The resulting "planning assessment" includes a comprehensive description, analysis, and evaluation of all environmental components at Fort Richardson. Additionally, it formalizes existing natural resource practices and can be used as an effective tool for future planning and decision making purposes.

As proposed projects within this INRMP are implemented, appropriate required NEPA documentation will be prepared. Projects will be evaluated to determine the need for and appropriate level of NEPA documentation such as a Record of Environmental Consideration (REC), EA with a FNSI, or an EIS with a Record of Decision (ROD).

In order to easily locate elements required for NEPA analysis which are woven throughout the INRMP, the following table has been prepared. The NEPA requirements have been listed with their corresponding locations within the document. The remaining sections relate specifically to the INRMP.

Table 1-1. Location of NEPA Analysis Sections within the INRMP				
EA Requirements	Sections within the INRMP			
Purpose of and Need for Action	Section 1.7.4			
Alternatives Including the Proposed Action	Chapters 3-7			
Affected Environment	Chapter 2			
Environmental Consequences	Chapter 9			
List of Agencies and Persons Consulted	Appendix			
References	Reference Section			
List of Preparers	Appendix			
Appendices				

1.8.4 Purpose of and Need for the Proposed Action

The US Army Alaska proposes to implement an Integrated Natural Resources Management Plan at Fort Richardson to support the management of natural resources using the methods described within the plan itself. The purpose of the plan is to support the military mission; to provide for USARAK's continuing need to train in a realistic environment; to maintain local community needs; and to comply with other laws and regulations including the Sikes Act Improvement Act. This plan is needed to set-forth a natural resources management philosophy to guide decision making actions over the next five years at Fort Richardson.

1.8.5 Description of the Proposed Action and Alternatives

1.8.5.1 Proposed Action

The proposed action is to implement the INRMP for Fort Richardson, Alaska over the 2002-2006 planning period. Implementation of this proposal would meet the Army's need to present natural resource

management goals, objectives, and policy on military lands in Alaska and to guide natural resource managers in decision-making regarding management of military land and proposed management projects concurrent with the military mission. The development of selected management measures for the INRMP involved a screening analysis of resource-specific alternatives during the development of individual resource management plans. The screening process involved the use of accepted criteria, standards, and guidelines, when available, and best professional judgment to identify management practices for achieving Fort Richardson natural resource objectives. The proposed action involves the implementation of the management objectives listed in Chapters 3–7 for each resource at Fort Richardson. The five-year planning period (2002-2006) allows for natural resources to be adaptively managed over time. Thus, projects and management schemes are structured to support this timeframe. Additional environmental analysis may be required with the development of new management schemes.

1.8.5.2 Current Management/No Action Alternative

Under the Current Management/No Action Alternative, the management objectives set forth in the INRMP would not be implemented. Current management policies would remain in effect and are described for each resource in Chapters 3–7. The existing conditions at Fort Richardson would continue as the status quo. This state is defined as those conditions described in Chapter 2, *Affected Environment*, without implementation of the proposed action objectives listed in Chapters 3–7. Development and consideration of a No Action alternative is required by CEQ regulation (40 CFR 1502.14(d)) and serves as a benchmark against which proposed federal actions can be evaluated.

This current INRMP is an update of the 1998-2002 Fort Richardson INRMP. During 1998-2001, many of the proposed projects in the 1998 plan were funded and implemented on Fort Richardson. Funds have been obligated towards completion of the following projects and are considered current management:

- Staff salaries, equipment, and supplies
- Cultural resource studies
- LCTA program
- Forest management plan and commercial feasibility study
- Range improvement activities
- Moose census work
- Development of the Cross Cultural Communications Steering Committee
- Development of a hunting, trapping, and fishing call-in system

1.8.5.3 Other Alternatives Considered and Eliminated

Additional alternatives considered for the management of Fort Richardson's natural resources are described and evaluated within the sections that discuss the management of each resource. During the development of these various management alternatives, it was determined that an infinite number of management schemes are possible. Consistent with the intent of NEPA, this process focused on considering a reasonable range of resource-specific management alternatives and, from those, developing a plan that could be implemented, as a whole, in the foreseeable future. Management alternatives that were considered during the above mentioned screening process, but not analyzed in detail, are discussed in Chapters 3–7 as is the rationale for their non-selection. Application of this screening process in developing the proposed action (implementation of the management options listed in Chapters 3–7 of this INRMP) eliminated the need to define and evaluate hypothetical alternatives to plan implementation. As a result, the EA (which is an integral part of this document) formally addresses only two alternatives, the proposed action and the no action alternative.

1.8.6 Scope of Analysis

The potential environmental effects associated with the proposed action are assessed in compliance with NEPA, regulations of the CEQ and AR 200-2. The Environmental Assessment component of this INRMP identifies, documents, and evaluates the effects of implementing the document at Fort Richardson. The INRMP addresses the geographical area associated with the contiguous properties of Fort Richardson, Alaska. As discussed, the EA component examines the Army's preferred alternative (i.e., the proposed action as described in Section 1.7.5.1 and the objectives listed in Section X.X) and a no action alternative (i.e., as described in Section 1.7.5.2) and their potential environmental effects. In addition, the existing environment was identified and used as a measure against which to analyze the proposed action. Thus, the potential beneficial and adverse effects associated with the proposal were determined and listed in Section 6.9.

While many aspects of the military mission are discussed in this INRMP, only the impacts of the natural resource alternatives are considered. Impacts of the transformation of USARAK units and impacts of the ongoing training mission will be considered in an upcoming Transformation EIS.

1.8.7 Interagency Coordination and Review

(Discussion of agency meetings; newsletter; questionnaire results; notice of intent publications; etc. to be updated in time.)

This INRMP and EA will be prepared in partnership with the US Fish and Wildlife Service, the Alaska Department of Fish and Game, and the Bureau of Land Management to reflect the mutual agreement of fish and wildlife conservation, protection, and management actions. On December 28, 2000, a formal agency consultation letter was mailed to the state and regional directors of the three agencies declaring USARAK's intent to update the INRMPs for the 2002-2006 planning period. Meetings and document review sessions were scheduled between USARAK and the partnering agencies to be held in Fairbanks and Anchorage.

Figure 1-1. General Location of Fort Richardson.						

